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(54) Title: HA4, A NEW OSTEOBLAST- AND CHONDROCYTE-SPECIFIC SMALL SECRETED PEPTIDE, COMPOSITIONS AND METHODS OF USE

(57) Abstract: A polypeptide designated HA4, expressed selectively by bone tissue, is provided. Transgenic animals that fail to express HA4 have bone formation abnormalities reflective of osteoporosis. Also provided are methods for promoting bone formation by increasing the activity or expression of HA4, methods of diagnosing or treating bone degenerative diseases, and methods of screening for drugs that alter bone formation.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/35139

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C07H 21/04; C12N 15/63, 15/85

US CL : 536/23.1, 435/320.1, 325

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 536/23.1, 435/320.1, 325

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

STN: EMBASE, BIOSIS, CAPLUS. STIC SEQUENCE SEARCH

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|---|-----------------------|
| X | Database GenCore, Accession Number, BD005704, JP 2001029090, ITO et al., Novel Polypeptide. January 2002. | 11-20 |

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

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"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

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